Attorney's Docket No.: 18202-018001 / (1082) Applicant: Lin Zhi et al. Amendment & Response to Office Action

Serial No.: 10/080,503

: February 22, 2002 Filed

AMENDMENTS TO THE CLAIMS:

Please amend claims 1 -3, 5-7, 9, 11-18, 20-21, 23, 25, 27, 29-30, 32, 35, 49-50, 58, 60-74, 80-88, and 90-107 as follows. Please cancel claims 78 and 79 without prejudice or disclaimer. This listing of claims replaces all prior versions, and listings of claims, in the application.

LISTING OF CLAIMS:

1. (currently amended) A compound having the formula:

(I)

OR

(II)

OR
$$R^{3} R^{4}$$

$$R^{2} X m V$$

$$R^{1} V$$

$$R^{1} R^{8}$$

(III)

OR

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$$\begin{array}{c|c}
R^{3} & R^{4} \\
R^{1} & X & M \\
R^{18} & N & R^{7}
\end{array}$$
(IV)

wherein:

R¹ is selected from the group of hydrogen, F, Cl, Br, I, NO₂, OR⁹, NR¹⁰R¹¹, S(O)_nR⁹, optionally substituted $C_1 - C_8$ alkyl, optionally substituted $C_1 - C_8$ haloalkyl, optionally substituted C₁ - C₈ heteroalkyl, optionally substituted C₃ - C₈ cycloalkyl, optionally substituted aryl, optionally substituted arylalkyl, optionally substituted heteroaryl, optionally substituted C₂ - C₈ alkynyl and optionally substituted C₂ - C₈ alkenyl, wherein the alkyl, haloalkyl, heteroalkyl, cycloalkyl, aryl, arylalkyl, heteroaryl, alkynyl and alkenyl groups may be optionally substituted;

R² is selected from the group of hydrogen, F, Cl, Br, I, CF₃, CF₂Cl, CF₂H, CFH₂, CF₂OR⁹, CH₂OR⁹, OR⁹, S(O)_nR⁹, NR¹⁰R¹¹, optionally substituted C₁ – C₈ alkyl, optionally substituted $C_1 - C_8$ haloalkyl, optionally substituted $C_1 - C_8$ heteroalkyl, optionally substituted C₃ – C₈ cycloalkyl, optionally substituted aryl, optionally substituted arylalkyl, optionally substituted heteroaryl, optionally substituted C₂ - C₈ alkynyl and optionally substituted C₂ – C₈ alkenyl, wherein the alkyl, haloalkyl, heteroalkyl, cycloalkyl aryl, arylalkyl, heteroaryl, alkynyl and alkenyl groups may be optionally substituted:

R³ and R⁴ each independently is selected from the group of hydrogen, OR⁹, S(O)_nR⁹, $NR^{10}R^{11}$, $C(Y)OR^{11}$, $C(Y)NR^{10}R^{11}$, optionally substituted $C_1 - C_8$ alkyl, optionally substituted C₁ - C₈ haloalkyl, optionally substituted C₁ - C₈ heteroalkyl, optionally substituted C₃ - C₈ cycloalkyl, optionally substituted aryl, optionally substituted arylalkyl, optionally substituted heteroaryl, optionally substituted C₂ - C₈ alkynyl and optionally substituted C₂ - C₈ alkenyl, wherein the alkyl, haloalkyl, heteroalkyl, cycloalkyl, aryl, arylalkyl, heteroaryl, alkynyl and alkenyl groups may be optionally substituted; or

R³ and R⁴ taken together form a three to eight membered saturated or unsaturated carbocyclic or heterocyclic ring; or

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R³ and R⁵ taken together form a three to eight membered saturated or unsaturated carbocyclic ring; or

R³ and R⁶ taken together form a three to eight membered saturated or unsaturated carbocyclic ring; or

R³ and R¹³ taken together form a three to eight membered saturated or unsaturated heterocyclic ring;

 R^5 and R^6 each independently are is selected from the group of hydrogen, CF_3 , CF_2Cl , CF_2H , CFH_2 , optionally substituted $C_1 - C_8$ alkyl, optionally substituted $C_1 - C_8$ haloalkyl, optionally substituted $C_1 - C_8$ heteroalkyl, optionally substituted $C_3 - C_8$ cycloalkyl, optionally substituted aryl, optionally substituted arylalkyl, optionally substituted heteroaryl, optionally substituted $C_2 - C_8$ alkynyl and optionally substituted $C_2 - C_8$ alkenyl, wherein the alkyl, haloalkyl, heteroalkyl, cycloalkyl, aryl, arylalkyl, heteroaryl, alkynyl and alkenyl groups may be optionally substituted; or

R⁵ and R⁶ taken together form a three to eight membered saturated or unsaturated carbocyclic ring; or

R⁵ and R¹³ taken together form a three to eight membered saturated or unsaturated heterocyclic ring; or

R⁶ and R¹³ taken together form a three to eight membered saturated or unsaturated heterocyclic ring;

 R^7 is selected from the group of hydrogen, F, Cl, Br, I, optionally substituted $C_1 - C_8$ alkyl, optionally substituted $C_1 - C_8$ haloalkyl, optionally substituted $C_1 - C_8$ heteroalkyl, optionally substituted aryl, optionally substituted heteroaryl, OR^9 , $S(O)_nR^9$, $NR^{10}R^{11}$, $C(Y)OR^{11}$ and $C(Y)NR^{10}R^{11}$, wherein the alkyl, haloalkyl, heteroalkyl, aryl and heteroaryl groups may be optionally substituted;

 R^8 is selected from the group of hydrogen, F, Cl, Br, I, optionally substituted $C_1 - C_8$ alkyl, optionally substituted $C_1 - C_8$ haloalkyl, optionally substituted $C_1 - C_8$ heteroalkyl, optionally substituted aryl, optionally substituted heteroaryl, OR^9 , $S(O)_nR^9$, $NR^{10}R^{11}$, $C(Y)OR^{11}$ and $C(Y)NR^{10}R^{11}$, wherein the alkyl, haloalkyl, heteroalkyl, aryl and heteroaryl groups may be optionally substituted;

 R^9 is selected from the group of hydrogen, <u>optionally substituted</u> $C_1 - C_8$ alkyl, <u>optionally substituted</u> $C_1 - C_8$ haloalkyl, <u>optionally substituted</u> $C_1 - C_8$ heteroalkyl, <u>optionally substituted</u> aryl, <u>optionally substituted</u> arylalkyl, <u>optionally substituted</u> arylalkyl, <u>optionally substituted</u> arylalkyl,

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wherein the alkyl, haloalkyl, heteroalkyl, aryl, heteroaryl and arylalkyl groups may be optionally substituted;

 R^{10} is selected from the group of hydrogen, <u>optionally substituted</u> $C_1 - C_8$ alkyl, <u>optionally substituted</u> $C_1 - C_8$ heteroalkyl, <u>optionally substituted</u> $C_1 - C_8$ heteroalkyl, <u>optionally substituted</u> aryl, <u>optionally substituted</u> heteroaryl, <u>optionally substituted</u> arylalkyl, CO_2R^{12} , $C(O)R^{12}$, SO_2R^{12} and $S(O)R^{12}$, wherein the alkyl, haloalkyl, heteroalkyl, aryl, heteroaryl and arylalkyl groups may be optionally substituted;

 R^{11} and R^{12} each independently is selected from the group of hydrogen, <u>optionally</u> substituted $C_1 - C_8$ alkyl, <u>optionally substituted</u> $C_1 - C_8$ haloalkyl, <u>optionally substituted</u> $C_1 - C_8$ heteroalkyl, <u>optionally substituted</u> aryl, <u>optionally substituted</u> heteroaryl and <u>optionally substituted</u> arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, aryl, heteroaryl and arylalkyl groups may be optionally substituted;

 R^{13} is selected from the group of optionally substituted $C_1 - C_8$ alkyl, optionally substituted $C_1 - C_8$ haloalkyl, optionally substituted $C_1 - C_8$ heteroalkyl, optionally substituted $C_2 - C_8$ alkenyl, optionally substituted $C_2 - C_8$ alkynyl, optionally substituted $C_3 - C_8$ cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted arylalkyl and optionally substituted heteroarylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, alkenyl, alkynyl, cycloalkyl, aryl, heteroaryl, arylalkyl and heteroarylalkyl groups may be optionally substituted;

 R^{16} is selected from the group of hydrogen, <u>optionally substituted</u> $C_1 - C_8$ alkyl, <u>optionally substituted</u> $C_1 - C_8$ haloalkyl, <u>optionally substituted</u> $C_1 - C_8$ heteroalkyl, COR^{17} , CO_2R^{17} and $CONR^{12}R^{17}$, wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted;

 R^{17} is selected from the group of hydrogen, <u>optionally substituted</u> $C_1 - C_8$ alkyl, <u>optionally substituted</u> $C_1 - C_8$ haloalkyl and $C_1 - C_8$ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted;

 R^{18} is selected from the group of hydrogen, F, Br, Cl, I, CN, $C_1 - C_8$ alkyl, optionally substituted $C_1 - C_8$ haloalkyl, $C_1 - C_8$ heteroalkyl, OR^{16} , $NR^{16}R^{17}$, SR^{16} , CH_2R^{16} , COR^{17} , CO_2R^{17} , CO_2R^{17} , $CONR^{16}R^{17}$, SOR^{17} and SO_2R^{17} , wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted;

 R^{19} is selected from the group of hydrogen, <u>optionally substituted</u> $C_1 - C_8$ alkyl, <u>optionally substituted</u> $C_1 - C_8$ haloalkyl, <u>optionally substituted</u> $C_1 - C_8$ heteroalkyl, <u>optionally substituted</u> $C_2 - C_8$ alkenyl, <u>optionally substituted</u> $C_3 - C_8$ alkenyl, <u>optionally substituted</u> $C_3 - C_8$ alkenyl, <u>optionally substituted</u> $C_3 - C_8$

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C₈ cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted arylalkyl and optionally substituted heteroarylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, alkenyl, alkynyl, cycloalkyl, aryl, heteroaryl, arylalkyl and heteroarylalkyl groups may be optionally substituted;

m is selected from the group of 0, 1 and 2;

n is selected from the group of 0, 1 and 2;

V is selected from the group of O and S;

W is selected from the group of O, $S(O)_n$, NH, $N\{R^{13}\}$, $N\{C(Y)R^{11}\}$ and $N\{SO_2R^{11}\}$;

X and Z each independently is selected from the group of O, $S(O)_n$, NH, $N\{R^{11}\}$, $N\{C(Y)R^{11}\}, N\{SO_2R^{12}\}$ and $N\{S(O)R^{12}\}$; and

Y is selected from the group of O, S, $N\{R^{19}\}$ and $N\{OR^{19}\}$; and pharmaceutically acceptable salts thereof, wherein the compound is a modulator for a member of the androgen receptor family.

- 2. (currently amended) A compound according to claim 1, wherein R¹ is selected from the group of hydrogen, F, Cl, OR⁹, NR¹⁰R¹¹, S(O)_nR⁹, optionally substituted C₁ - C₄ alkyl, optionally substituted $C_1 - C_4$ haloalkyl and optionally substituted $C_1 - C_4$ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted.
- 3. (currently amended) A compound according to claim 2, wherein R¹ is selected from the group of hydrogen, F, Cl, optionally substituted C₁ - C₄ alkyl, optionally substituted C₁ - C₄ haloalkyl and optionally substituted C₁ - C₄ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted.
- 4. (original) A compound according to claim 3, wherein R¹ is selected from the group of hydrogen, F and optionally substituted $C_1 - C_4$ alkyl.
- 5. (currently amended) A compound according to claim 1, wherein R² is selected from the group of hydrogen, F, Cl, Br, I, CF₃, CF₂Cl, CF₂H, CFH₂, CF₂OR⁹, CH₂OR⁹, OR⁹, $S(O)_n R^9$, optionally substituted $C_1 - C_6$ alkyl, optionally substituted $C_1 - C_6$ haloalkyl, optionally substituted C1 - C6 heteroalkyl, optionally substituted C2 - C6 alkynyl and optionally substituted C₂ - C₆ alkenyl, wherein the alkyl, haloalkyl, heteroalkyl, alkynyl and alkenyl groups may be optionally substituted.
- 6. (currently amended) A compound according to claim 5, wherein R² is selected from the group of hydrogen, F, Cl, CF₃, CF₂Cl, CF₂H, CFH₂, optionally substituted C₁ - C₄

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alkyl, optionally substituted $C_1 - C_4$ haloalkyl and optionally substituted $C_1 - C_4$ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted.

7. (currently amended) A compound according to claim 6, wherein R^2 is selected from the group of hydrogen, optionally substituted $C_1 - C_2$ alkyl, optionally substituted $C_1 - C_2$ haloalkyl and optionally substituted $C_1 - C_2$ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted.

- 8. (original) A compound according to claim 7, wherein R² is CF₃.
- 9. (currently amended) A compound according to claim 1, wherein

 R^3 is selected from the group of hydrogen, <u>optionally substituted</u> $C_1 - C_6$ alkyl, <u>optionally substituted</u> $C_1 - C_6$ haloalkyl, <u>optionally substituted</u> $C_1 - C_6$ heteroalkyl, $C(Y)OR^{11}$ and $C(Y)NR^{10}R^{11}$, wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted; or

R³ and R⁶ taken together form a three to eight membered saturated or unsaturated carbocyclic ring.

- 10. (original) A compound according to claim 9, wherein R³ and R⁶ taken together form a four to six membered saturated or unsaturated carbocyclic ring.
- 11. (currently amended) A compound according to claim 9, wherein R^3 is selected from the group of hydrogen, optionally substituted $C_1 C_4$ alkyl, optionally substituted $C_1 C_4$ haloalkyl and optionally substituted $C_1 C_4$ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted.
- 12. (currently amended) A compound according to claim 1, wherein R^6 is selected from the group of hydrogen, CF_3 , CF_2Cl , CF_2H , CFH_2 , optionally substituted $C_1 C_6$ alkyl, optionally substituted $C_1 C_6$ haloalkyl, optionally substituted $C_1 C_6$ heteroalkyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted $C_2 C_6$ alkynyl and optionally substituted $C_2 C_6$ alkenyl, wherein the alkyl, heteroaryl, haloalkyl, aryl, arylalkyl, heteroaryl, alkynyl and alkenyl groups may be optionally substituted.
- 13. (currently amended) A compound according to claim 12, wherein R^6 is selected from the group of hydrogen, CF_3 , CF_2Cl , CF_2H , CFH_2 , optionally substituted $C_1 C_4$ alkyl, optionally substituted $C_1 C_4$ heteroalkyl, optionally

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<u>substituted</u> $C_2 - C_4$ alkynyl and <u>optionally substituted</u> $C_2 - C_4$ alkenyl, wherein the alkyl, heteroalkyl, haloalkyl, alkynyl and alkenyl groups may be optionally substituted.

- 14. (currently amended) A compound according to claim 13, wherein R^6 is selected from the group of hydrogen, CF_3 , CF_2Cl , CF_2H , CFH_2 , optionally substituted $C_1 C_4$ alkyl, optionally substituted $C_1 C_4$ haloalkyl and optionally substituted $C_1 C_4$ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted.
- 15. (currently amended) A compound according to claim 12, wherein R⁶ is selected from the group of <u>optionally substituted</u> aryl, <u>optionally substituted</u> arylalkyl and <u>optionally substituted</u> heteroaryl, wherein the aryl, arylalkyl and heteroaryl groups may be optionally <u>substituted</u>.
- 16. (currently amended) A compound according to claim 1, wherein R^5 is selected from the group of hydrogen, CF_3 , CF_2Cl , CF_2H , CFH_2 , optionally substituted $C_1 C_6$ alkyl, optionally substituted $C_1 C_6$ heteroalkyl, optionally substituted $C_1 C_6$ heteroalkyl, optionally substituted $C_2 C_6$ alkenyl, optionally substituted $C_2 C_6$ alkenyl, wherein the alkyl, haloalkyl, heteroalkyl, alkynyl and alkenyl groups may be optionally substituted.
- 17. (currently amended) A compound according to claim 16, wherein R^5 is selected from the group of hydrogen, CF_3 , CF_2Cl , CF_2H , CFH_2 , optionally substituted $C_1 C_6$ alkyl, optionally substituted $C_1 C_6$ haloalkyl and optionally substituted $C_1 C_6$ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted.
- 18. (currently amended) A compound according to claim 17, wherein R^5 is selected from the group of hydrogen, CF_3 , CF_2Cl , CF_2H , CFH_2 , optionally substituted $C_1 C_4$ alkyl, optionally substituted $C_1 C_4$ haloalkyl and optionally substituted $C_1 C_4$ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted.
 - 19. (original) A compound according to claim 18, wherein R⁵ is hydrogen or CF₃.
- 20. (currently amended) A compound according to claim 1, wherein R^7 is selected from the group of hydrogen, F, Cl, optionally substituted $C_1 C_4$ alkyl, optionally substituted $C_1 C_4$ haloalkyl and optionally substituted $C_1 C_4$ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl, groups may be optionally substituted.

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21. (currently amended) A compound according to claim 1, wherein R^8 is selected from the group of hydrogen, F, Cl, optionally substituted $C_1 - C_4$ alkyl, optionally substituted $C_1 - C_4$ haloalkyl and optionally substituted $C_1 - C_4$ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl, groups may be optionally substituted.

- 22. (original) A compound according to claim 21, wherein \mathbb{R}^7 and \mathbb{R}^8 are each hydrogen or optionally substituted $\mathbb{C}_1 \mathbb{C}_2$ alkyl.
- 23. (currently amended) A compound according to claim 1, wherein R^9 is selected from the group of hydrogen, optionally substituted $C_1 C_6$ alkyl, optionally substituted $C_1 C_6$ haloalkyl and optionally substituted $C_1 C_6$ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted.
- 24. (original) A compound according to claim 23, wherein R^9 is selected from the group of hydrogen and optionally substituted $C_1 C_4$ alkyl.
- 25. (currently amended) A compound according to claim 1, wherein R^{10} is selected from the group of hydrogen, $S(O)R^{12}$, SO_2R^{12} , $C(O)R^{12}$, CO_2R^{12} , optionally substituted $C_1 C_6$ alkyl, optionally substituted $C_1 C_6$ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted.
- 26. (original) A compound according to claim 25, wherein R^{10} is selected from the group of hydrogen, $S(O)R^{12}$, SO_2R^{12} , $C(O)R^{12}$ and CO_2R^{12} .
- 27. (currently amended) A compound according to claim 1, wherein R^4 is selected from the group of hydrogen, optionally substituted $C_1 C_4$ alkyl, optionally substituted $C_1 C_4$ haloalkyl and optionally substituted $C_1 C_4$ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted.
- 28. (original) A compound according to claim 27, wherein R^4 is selected from the group of hydrogen and optionally substituted $C_1 C_2$ alkyl.
- 29. (currently amended) A compound according to claim 1, wherein R^{13} is selected from the group of CF_3 , CF_2Cl , CF_2H , CFH_2 , CH_2CF_3 , CH_2CF_2Cl , CH_2CCl_2F , optionally substituted $C_1 C_6$ alkyl, optionally substituted $C_3 C_6$ cycloalkyl, optionally substituted $C_1 C_6$ haloalkyl, optionally substituted $C_1 C_6$ heteroalkyl, optionally substituted $C_2 C_6$ alkynyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted arylalkyl and optionally substituted

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heteroarylalkyl, wherein the alkyl, cycloalkyl, haloalkyl, heteroalkyl, alkenyl, alkynyl, aryl, heteroaryl, arylalkyl and heteroarylalkyl groups may be optionally substituted; or

R⁶ and R¹³ taken together form a five to seven membered saturated or unsaturated heterocyclic ring.

30. (currently amended) A compound according to claim 29, wherein R^{13} is selected from the group of CF_3 , CF_2Cl , CF_2H , CFH_2 , CH_2CF_3 , CH_2CF_2Cl , CH_2CCl_2F , optionally substituted $C_1 - C_4$ alkyl, optionally substituted $C_1 - C_4$ haloalkyl, optionally substituted $C_1 - C_4$ heteroalkyl, optionally substituted $C_2 - C_4$ alkenyl and optionally substituted aryl, wherein the alkyl, haloalkyl, heteroalkyl, alkenyl and aryl groups may be optionally substituted; or

R⁶ and R¹³ taken together form a five to six membered saturated or unsaturated heterocyclic ring.

31. (original) A compound according to claim 30, wherein R¹³ is selected from the group of CF₃, CF₂Cl, CF₂H, CFH₂, CH₂CF₃, CH₂CF₂Cl, CH₂CCl₂F, methyl, ethyl, propyl, isoputyl, cyclopropylmethyl, allyl; or

 ${\rm R}^6$ and ${\rm R}^{13}$ taken together form a five membered saturated or unsaturated heterocyclic ring.

- 32. (currently amended) A compound according to claim 1, wherein R^{18} is selected from the group of hydrogen, F, Cl, OR^{16} , SR^{16} , $NR^{16}R^{17}$, $C_1 C_4$ alkyl, and optionally substituted $C_1 C_4$ haloalkyl and $C_4 C_4$ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted.
- 33. (original) A compound according to claim 32, wherein R¹⁸ is selected from the group of hydrogen, F, Cl, OR¹⁶, SR¹⁶ and NR¹⁶R¹⁷.
- 34. (original) A compound according to claim 33, wherein R¹⁸ is selected from the group of hydrogen, F, Cl and OR¹⁶.
- 35. (currently amended) A compound according to claim 1, wherein R^{19} is selected from the group of hydrogen, optionally substituted $C_1 C_4$ alkyl, optionally substituted $C_1 C_4$ haloalkyl and optionally substituted $C_1 C_4$ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted.

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36. (original) A compound according to claim 35, wherein R^{19} is selected from the group of hydrogen and optionally substituted $C_1 - C_4$ alkyl.

- 37. (original) A compound according to claim 1, wherein m is 0 or 1.
- 38. (original) A compound according to claim 37, wherein m is 1.
- 39. (original) A compound according to claim 1, wherein W is selected from the group of NH, $N\{R^{13}\}$, $N\{C(Y)R^{11}\}$ and $N\{SO_2R^{11}\}$.
 - 40. (original) A compound according to claim 39, wherein W is NH or $N\{R^{13}\}$.
- 41. (original) A compound according to claim 1, wherein X is selected from the group of O, S, NH and $N\{R^{11}\}$.
 - 42. (original) A compound according to claim 41, wherein X is O or S.
 - 43. (original) A compound according to claim 1, wherein Y is O or S.
 - 44. (original) A compound according to claim 43, wherein Y is O.
- 45. (original) A compound according to claim 1, wherein Z is selected from the group of NH, $N\{R^{11}\}$ and O.
 - 46. (original) A compound according to claim 45, wherein Z is NH or $N\{R^{11}\}$.
 - 47. (original) A compound according to claim 1, wherein V is S.
 - 48. (original) A compound according to claim 1, wherein V is O.
 - 49. (currently amended) A compound according to claim 1, wherein:

 R^1 is selected from the group of hydrogen, F, Cl, OR^9 , $S(O)_nR^9$, $NR^{10}R^{11}$, optionally substituted $C_1 - C_4$ alkyl, optionally substituted $C_1 - C_4$ haloalkyl and optionally substituted $C_1 - C_4$ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted;

 R^2 is selected from the group of hydrogen, F, Cl, Br, I, CF₃, CF₂Cl, CF₂H, CFH₂, CF₂OR⁹, CH₂OR⁹, OR⁹, S(O)_nR⁹, optionally substituted C₁ – C₆ alkyl, optionally substituted C₁ – C₆ haloalkyl, optionally substituted C₁ – C₆ heteroalkyl, optionally substituted C₂ – C₆ alkynyl and optionally substituted C₂ – C₆ alkenyl, wherein the alkyl, haloalkyl, heteroalkyl, alkynyl and alkenyl groups may be optionally substituted;

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 R^3 is selected from the group of hydrogen, <u>optionally substituted</u> $C_1 - C_6$ alkyl, <u>optionally substituted</u> $C_1 - C_6$ haloalkyl, <u>optionally substituted</u> $C_1 - C_6$ heteroalkyl, $C(Y)OR^{11}$ and $C(Y)NR^{10}R^{11}$, wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted; or

R³ and R⁶ taken together form a three to eight membered saturated or unsaturated carbocyclic ring;

 R^5 is selected from the group of hydrogen, CF_3 , CF_2Cl , CF_2H , CFH_2 , optionally substituted $C_1 - C_6$ alkyl, optionally substituted $C_1 - C_6$ haloalkyl, optionally substituted $C_1 - C_6$ heteroalkyl, optionally substituted $C_2 - C_6$ alkynyl and optionally substituted $C_2 - C_6$ alkenyl, wherein the alkyl, haloalkyl, heteroalkyl, alkynyl and alkenyl groups may be optionally substituted;

 R^6 is selected from the group of hydrogen, CF_3 , CF_2Cl , CF_2H , CFH_2 , optionally substituted $C_1 - C_6$ alkyl, optionally substituted $C_1 - C_6$ haloalkyl, optionally substituted $C_1 - C_6$ heteroalkyl, optionally substituted aryl, optionally substituted arylalkyl, optionally substituted heteroaryl, optionally substituted $C_2 - C_6$ alkynyl and optionally substituted $C_2 - C_6$ alkenyl, wherein the alkyl, haloalkyl, heteroalkyl, aryl, arylalkyl, heteroaryl, alkynyl and alkenyl groups may be optionally substituted; or

 ${
m R}^6$ and ${
m R}^{13}$ taken together form a five to seven membered saturated or unsaturated heterocyclic ring.

50. (currently amended) A compound according to claim 49, wherein:

 R^7 is selected from the group of hydrogen, F, Cl, optionally substituted $C_1 - C_4$ alkyl, optionally substituted $C_1 - C_4$ haloalkyl and optionally substituted $C_1 - C_4$ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted;

 R^8 is selected from the group of hydrogen, F, Cl, <u>optionally substituted</u> $C_1 - C_4$ alkyl, <u>optionally substituted</u> $C_1 - C_4$ haloalkyl and <u>optionally substituted</u> $C_1 - C_4$ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted;

 R^{13} is selected from the group of CF_3 , CF_2Cl , CF_2H , CFH_2 , CH_2CF_3 , CH_2CF_2Cl , CH_2CCl_2F , optionally substituted $C_1 - C_6$ alkyl, optionally substituted $C_1 - C_6$ haloalkyl, optionally substituted $C_1 - C_6$ heteroalkyl, optionally substituted $C_3 - C_6$ cycloalkyl, optionally substituted $C_2 - C_6$ alkenyl, optionally substituted $C_2 - C_6$ alkynyl, optionally substituted aryl, optionally substituted arylalkyl and

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optionally substituted heteroarylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, cycloalkyl, alkenyl, alkynyl, aryl, heteroaryl, arylalkyl, and heteroarylalkyl groups may be optionally substituted; or

R⁶ and R¹³ taken together form a five to seven membered saturated or unsaturated heterocyclic ring; and

 R^{18} is selected from the group of hydrogen, F, Cl, OR^{16} , SR^{16} , $NR^{16}R^{17}$, $C_1 - C_4$ alkyl, and optionally substituted $C_1 - C_4$ haloalkyl and $C_4 - C_4$ heteroalkyl, wherein the alkyl, haloalkyl, heteroalkyl groups may be optionally substituted.

51. (original) A compound according to claim 50, wherein:

m is 0 or 1;

W is selected from the group of NH, $N\{R^{13}\}$, $N\{C(Y)R^{11}\}$ and $N\{SO_2R^{11}\}$;

X is selected from the group of O, S, NH and $N\{R^{11}\}$;

Y is O or S; and

Z is selected from the group of NH, $N\{R^{11}\}$ and O.

- 52. (original) A compound according to claim 1, wherein said compound is represented by formula (I).
- 53. (original) A compound according to claim 1, wherein said compound is represented by formula (II).
- 54. (original) A compound according to claim 1, wherein said compound is represented by formula (III).
- 55. (original) A compound according to claim 1, wherein said compound is represented by formula (IV).
- 56. (original) A compound according to claim 1, wherein said compound is selected from the group of:
- (3R)-2,3,4,7-Tetrahydro-3-methyl-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;
- (3R)-2,3,4,7-Tetrahydro-3,4-dimethyl-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;

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(3R)-4-Ethyl-2,3,4,7-tetrahydro-3-methyl-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;

- (3R)-2,3,4,7-Tetrahydro-3-methyl-4-(2,2,2-trifluoroethyl)-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;
- (3R)-2,3,4,7-Tetrahydro-3-methyl-4-propyl-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;
- (3*R*)-4-Allyl-2,3,4,7-tetrahydro-3-methyl-10-(trifluoromethyl)-8*H*-[1,4]oxazino[2,3-*f*]quinolin-8-one;
- (3R)-3-Ethyl-2,3,4,7-tetrahydro-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;
- (3R)-3-Ethyl-2,3,4,7-tetrahydro-4-methyl-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;
- (3R)-3,4-Diethyl-2,3,4,7-tetrahydro-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;
- (3*R*)-3-Ethyl-2,3,4,7-tetrahydro-4-(2,2,2-trifluoroethyl)-10-(trifluoromethyl)-8*H*-[1,4]oxazino[2,3-*f*]quinolin-8-one;
- (3R)-4-(2-Chloro-2,2-difluoroethyl)-3-ethyl-2,3,4,7-tetrahydro-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;
- (3*R*)-4-(2,2-Difluoroethyl)-3-ethyl-2,3,4,7-tetrahydro-10-(trifluoromethyl)-8*H*-[1,4]oxazino[2,3-*f*]quinolin-8-one;
- (3R)-3-Ethyl-2,3,4,7-tetrahydro-4-propyl-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;
- (3R)-4-Allyl-3-ethyl-2,3,4,7-tetrahydro-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;
- (3R)-3-Ethyl-2,3,4,7-tetrahydro-4-isobutyl-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;
- (3R/S)-2,3,4,7-Tetrahydro-3-propyl-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;

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(3*R/S*)-2,3,4,7-Tetrahydro-4-methyl-3-propyl-10-(trifluoromethyl)-8*H*-[1,4]oxazino[2,3-*f*]quinolin-8-one;

- (3R/S)-4-Ethyl-2,3,4,7-tetrahydro-3-propyl-4-(2,2,2-trifluoroethyl)-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;
- (3R/S)-2,3,4,7-Tetrahydro-3-propyl-4-(2,2,2-trifluoroethyl)-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;
- (3R)-2,3,4,7-Tetrahydro-3-isopropyl-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;
- (3R)-2,3,4,7-Tetrahydro-3-isopropyl-4-methyl-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;
- (3R)-4-Ethyl-2,3,4,7-tetrahydro-3-isopropyl-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;
- (3R)-2,3,4,7-Tetrahydro-3-isopropyl-4-(2,2,2-trifluoroethyl)-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;
- (3R)-4-(2-Chloro-2,2-difluoroethyl)-2,3,4,7-tetrahydro-3-isopropyl-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;
- (3*R*)-4-(2,2-Difluoroethyl)-2,3,4,7-tetrahydro-3-isopropyl-10-(trifluoromethyl)-8*H*-[1,4]oxazino[2,3-*f*]quinolin-8-one;
- (3R)-4-Allyl-2,3,4,7-tetrahydro-3-isopropyl-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;
- (3R)-2,3,4,7-Tetrahydro-3-phenyl-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;
- (3*R*)-2,3,4,7-Tetrahydro-3-phenyl-4-(2,2,2-trifluoroethyl)-10-(trifluoromethyl)-8*H*-[1,4]oxazino[2,3-*f*]quinolin-8-one;
- (3R)-4-Cyclopropylmethyl-2,3,4,7-tetrahydro-3-phenyl-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;
- (3*R*)-3-Benzyl-2,3,4,7-tetrahydro-4-(2,2,2-trifluoroethyl)-10-(trifluoromethyl)-8*H*-[1,4]oxazino[2,3-*f*]quinolin-8-one;
 - 2,3,4,7-Tetrahydro-10-(trifluoromethyl)-8*H*-[1,4]oxazino[2,3-*f*]quinolin-8-one;

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2,3,4,7-tetrahydro-4-(2,2,2-trifluoroethyl)-10-(trifluoromethyl)-8*H*-[1,4]oxazino[2,3-f]quinolin-8-one;

(7aR, 10aS)-7,7a,8,9,10,10a-Hexahydro-1-(trifluoromethyl)-7-(2,2,2-trifluoroethyl)-4H-cyclopenta[5,6][1,4]oxazino[2,3-f]quinolin-3-one;

(7aR, 10aS)-7-Ethyl-7,7a,8,9,10,10a-hexahydro-1-(trifluoromethyl)-4H-cyclopenta[5,6][1,4]oxazino[2,3-f]quinolin-3-one;

(7aR,10aS)-7,7a,8,9,10,10a-Hexahydro-3-isopropoxy-1-(trifluoromethyl)-7-(2,2,2-trifluoroethyl)-4*H*-cyclopenta[5,6][1,4]oxazino[2,3-*f*]quinolin-3-one;

 (\pm) -(2S,3R)-2,3,4,7-Tetrahydro-2,3-dimethyl-4-(2,2,2-trifluoroethyl)-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;

(6aR)-6a,7,8,9 -Tetrahydro-4-(trifluoromethyl)-1H,6H-pyrrolo[1',2':4,5][1,4]oxazino[2,3-f]quinolin-2-one_;

2,3,4,7-Tetrahydro-2,2,4-trimethyl-10-(trifluoromethyl)-8*H*-[1,4]oxazino[2,3-f]quinolin-8-one;

- (3R)-8-Chloro-3-ethyl-3,4-dihydro-8-isopropoxy-4-(2,2,2-trifluoroethyl)-10-(trifluoromethyl)-2H-[1,4]oxazino[2,3-f]quinoline;
- (3R) -3-Ethyl-3,4-dihydro-8-isopropoxy-8-methoxy-4-(2,2,2-trifluoroethyl)-10-(trifluoromethyl)-2H-[1,4]oxazino[2,3-f]quinoline;
- (\pm) -2,3,4,7-Tetrahydro-4-(2,2,2-trifluoroethyl)-3,10-bis(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;
- (-)-2,3,4,7-Tetrahydro-4-(2,2,2-trifluoroethyl)-3,10-bis(trifluoromethyl)-8*H*-[1,4]oxazino[2,3-*f*]quinolin-8-one;
- (+)-2,3,4,7-Tetrahydro-4-(2,2,2-trifluoroethyl)-3,10-bis(trifluoromethyl)-8*H*-[1,4]oxazino[2,3-*f*]quinolin-8-one;
- (\pm) -2,3,4,7-Tetrahydro-3-(2,2,2-trifluoroethyl)-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;
- (\pm) -2,3,4,7-Tetrahydro-4-methyl-3-(2,2,2-trifluoroethyl)-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;

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(\pm)-4-Ethyl-2,3,4,7-tetrahydro-3-(2,2,2-trifluoroethyl)-10-(trifluoromethyl)-8*H*-[1,4]oxazino[2,3-f]quinolin-8-one;

- (±)-2,3,4,7-Tetrahydro-3,4-bis(2,2,2-trifluoroethyl)-10-(trifluoromethyl)-8*H*-[1,4]oxazino[2,3-*f*]quinolin-8-one;
- (-)-2,3,4,7-Tetrahydro-3,4-bis(2,2,2-trifluoroethyl)-10-(trifluoromethyl)-8*H*-[1,4]oxazino[2,3-*f*]quinolin-8-one;
- (+)-2,3,4,7-Tetrahydro-3,4-bis(2,2,2-trifluoroethyl)-10-(trifluoromethyl)-8*H*-[1,4]oxazino[2,3-*f*]quinolin-8-one;
- (\pm)-4-Cyclopropylmethyl-2,3,4,7-tetrahydro-3-(2,2,2-trifluoroethyl)-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;
- (3*R*)-4-Cyclopropylmethyl-3-ethyl-2,3,4,7-tetrahydro-10-(trifluoromethyl)-8*H*-[1,4]oxazino[2,3-*f*]quinolin-8-one;
- (3*R*)-4-(2-Chloroethyl)-2,3,4,7-tetrahydro-3-isopropyl-10-(trifluoromethyl)-8*H*-[1,4]oxazino[2,3-*f*]quinolin-8-one;
- (\pm) -2,3,4,7-Tetrahydro-2-methyl-4-(2,2,2-trifluoroethyl)-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;
- (3R)-3-Ethyl-4-(2-hydroxy-2-methylpropyl)-2,3,4,7-tetrahydro-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one; and
- (3R)-2,3,4,7-Tetrahydro-3-isobutyl-4-(2,2,2-trifluoroethyl)-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one.
- 57. (original) A compound according to claim 1, wherein said compound is selected from the group of:
- (3R)-2,3,4,7-Tetrahydro-3-methyl-4-(2,2,2-trifluoroethyl)-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;
- (3R)-3-Ethyl-2,3,4,7-tetrahydro-4-(2,2,2-trifluoroethyl)-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;
- (3*R*)-4-(2-Chloro-2,2-difluoroethyl)-3-ethyl-2,3,4,7-tetrahydro-10-(trifluoromethyl)-8*H*-[1,4]oxazino[2,3-*f*]quinolin-8-one;

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(3R)-4-(2,2-Difluoroethyl)-3-ethyl-2,3,4,7-tetrahydro-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;

- (3*R*)-2,3,4,7-Tetrahydro-3-isopropyl-4-(2,2,2-trifluoroethyl)-10-(trifluoromethyl)-8*H*-[1,4]oxazino[2,3-*f*]quinolin-8-one;
- (3R)-4-(2-Chloro-2,2-difluoroethyl)-2,3,4,7-tetrahydro-3-isopropyl-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;
- (3R)-4-(2,2-Difluoroethyl)-2,3,4,7-tetrahydro-3-isopropyl-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;

(7aR, 10aS)-7-Ethyl-7,7a,8,9,10,10a-hexahydro-1-(trifluoromethyl)-4H-cyclopenta[5,6][1,4]oxazino[2,3-f]quinolin-3-one;

(7aR,10aS)-7,7a,8,9,10,10a-Hexahydro-1-(trifluoromethyl)-7-(2,2,2-trifluoroethyl)-4*H*-cyclopenta[5,6][1,4]oxazino[2,3-*f*]quinolin-3-one;

 (\pm) -(2S,3R)-2,3,4,7-Tetrahydro-2,3-dimethyl-4-(2,2,2-trifluoroethyl)-10-(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;

 (\pm) -2,3,4,7-Tetrahydro-4-(2,2,2-trifluoroethyl)-3,10-bis(trifluoromethyl)-8H-[1,4]oxazino[2,3-f]quinolin-8-one;

(-)-2,3,4,7-Tetrahydro-4-(2,2,2-trifluoroethyl)-3,10-bis(trifluoromethyl)-8*H*-[1,4]oxazino[2,3-*f*]quinolin-8-one;

(+)-2,3,4,7-Tetrahydro-4-(2,2,2-trifluoroethyl)-3,10-bis(trifluoromethyl)-8*H*-[1,4]oxazino[2,3-*f*]quinolin-8-one.

58. (currently amended) A pharmaceutical composition comprising a pharmaceutically acceptable carrier and a compound of formula:

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(II)

or $\begin{array}{c|c}
R^3 & R^4 \\
R^2 & X & M \\
\end{array}$ $\begin{array}{c|c}
R^3 & R^4 \\
\end{array}$ $\begin{array}{c|c}
V \\
\end{array}$ $\begin{array}{c|c}
R^7 & R^8 \\
\end{array}$

(III) or

$$\begin{array}{c|c}
R^3 & R^4 \\
R^1 & W \\
R^{18} & N & R^7 \\
R^8 & R^7
\end{array}$$

(IV)

wherein:

 R^1 is selected from the group of hydrogen, F, Cl, Br, I, NO_2 , OR^9 , $NR^{10}R^{11}$, $S(O)_nR^9$, optionally substituted $C_1 - C_8$ alkyl, optionally substituted $C_1 - C_8$ haloalkyl, optionally substituted $C_1 - C_8$ heteroalkyl, optionally substituted $C_3 - C_8$ cycloalkyl, optionally substituted arylalkyl, optionally substituted heteroaryl, optionally

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substituted $C_2 - C_8$ alkynyl and optionally substituted $C_2 - C_8$ alkenyl, wherein the alkyl, haloalkyl, heteroalkyl, cycloalkyl, aryl, arylalkyl, heteroaryl, alkynyl and alkenyl groups may be optionally substituted;

 R^2 is selected from the group of hydrogen, F, Cl, Br, I, CF₃, CF₂Cl, CF₂H, CFH₂, CF₂OR⁹, CH₂OR⁹, OR⁹, S(O)_nR⁹, NR¹⁰R¹¹, optionally substituted C₁ – C₈ alkyl, optionally substituted C₁ – C₈ haloalkyl, optionally substituted C₁ – C₈ heteroalkyl, optionally substituted aryl, optionally substituted arylalkyl, optionally substituted arylalkyl, optionally substituted heteroaryl, optionally substituted C₂ – C₈ alkynyl and optionally substituted C₂ – C₈ alkenyl, wherein the alkyl, haloalkyl, heteroalkyl, cycloalkyl aryl, arylalkyl, heteroaryl, alkynyl and alkenyl groups may be optionally substituted;

 R^3 and R^4 each independently is selected from the group of hydrogen, OR^9 , $S(O)_n R^9$, $NR^{10}R^{11}$, $C(Y)OR^{11}$, $C(Y)NR^{10}R^{11}$, optionally substituted $C_1 - C_8$ alkyl, optionally substituted $C_1 - C_8$ haloalkyl, optionally substituted $C_1 - C_8$ heteroalkyl, optionally substituted aryl, optionally substituted arylalkyl, optionally substituted arylalkyl, optionally substituted $C_2 - C_8$ alkynyl and optionally substituted $C_2 - C_8$ alkynyl and optionally substituted $C_2 - C_8$ alkenyl, wherein the alkyl, haloalkyl, heteroalkyl, cycloalkyl, aryl, arylalkyl, heteroaryl, alkynyl and alkenyl groups may be optionally substituted, or

R³ and R⁴ taken together form a three to eight membered saturated or unsaturated carbocyclic or heterocyclic ring; or

R³ and R⁵ taken together form a three to eight membered saturated or unsaturated carbocyclic ring; or

R³ and R⁶ taken together form a three to eight membered saturated or unsaturated carbocyclic ring; or

R³ and R¹³ taken together form a three to eight membered saturated or unsaturated heterocyclic ring;

 R^5 and R^6 each independently are selected from the group of hydrogen, CF_3 , CF_2Cl , CF_2H , CFH_2 , optionally substituted $C_1 - C_8$ alkyl, optionally substituted $C_1 - C_8$ haloalkyl, optionally substituted $C_1 - C_8$ heteroalkyl, optionally substituted $C_3 - C_8$ cycloalkyl, optionally substituted aryl, optionally substituted arylalkyl, optionally substituted heteroaryl, optionally substituted $C_2 - C_8$ alkynyl and optionally substituted $C_2 - C_8$ alkenyl, wherein the

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alkyl, haloalkyl, heteroalkyl, cycloalkyl, aryl, arylalkyl, heteroaryl, alkynyl and alkenyl groups may be optionally substituted; or

R⁵ and R⁶ taken together form a three to eight membered saturated or unsaturated carbocyclic ring; or

R⁵ and R¹³ taken together form a three to eight membered saturated or unsaturated heterocyclic ring; or

 R^6 and R^{13} taken together form a three to eight membered saturated or unsaturated heterocyclic ring;

 R^7 is selected from the group of hydrogen, F, Cl, Br, I, optionally substituted $C_1 - C_8$ alkyl, optionally substituted $C_1 - C_8$ haloalkyl, optionally substituted $C_1 - C_8$ optionally substituted heteroarkyl, optionally substituted aryl, optionally substituted heteroaryl, OR^9 , $S(O)_nR^9$, $NR^{10}R^{11}$, $C(Y)OR^{11}$ and $C(Y)NR^{10}R^{11}$, wherein the alkyl, haloalkyl, heteroalkyl, aryl and heteroaryl groups may be optionally substituted;

 R^8 is selected from the group of hydrogen, F, Cl, Br, I, optionally substituted $C_1 - C_8$ alkyl, optionally substituted $C_1 - C_8$ haloalkyl, optionally substituted $C_1 - C_8$ heteroalkyl, optionally substituted aryl, optionally substituted heteroaryl, OR^9 , $S(O)_nR^9$, $NR^{10}R^{11}$, $C(Y)OR^{11}$ and $C(Y)NR^{10}R^{11}$, wherein the alkyl, haloalkyl, heteroalkyl, aryl and heteroaryl groups may be optionally substituted;

 R^9 is selected from the group of hydrogen, <u>optionally substituted</u> $C_1 - C_8$ alkyl, <u>optionally substituted</u> $C_1 - C_8$ haloalkyl, <u>optionally substituted</u> $C_1 - C_8$ heteroalkyl, <u>optionally substituted</u> aryl, <u>optionally substituted</u> arylalkyl, <u>optionally substituted</u> arylalkyl, <u>heteroalkyl, aryl, heteroaryl and arylalkyl groups may be optionally substituted</u>;

 R^{10} is selected from the group of hydrogen, <u>optionally substituted</u> $C_1 - C_8$ alkyl, <u>optionally substituted</u> $C_1 - C_8$ haloalkyl, <u>optionally substituted</u> $C_1 - C_8$ heteroalkyl, <u>optionally substituted</u> aryl, <u>optionally substituted</u> arylalkyl, CO_2R^{12} , $C(O)R^{12}$, SO_2R^{12} and $S(O)R^{12}$, wherein the alkyl, haloalkyl, heteroalkyl, aryl, heteroaryl and arylalkyl groups may be optionally substituted;

 R^{11} and R^{12} each independently is selected from the group of hydrogen, <u>optionally</u> substituted $C_1 - C_8$ alkyl, <u>optionally substituted</u> $C_1 - C_8$ haloalkyl, <u>optionally substituted</u> $C_1 - C_8$ heteroalkyl, <u>optionally substituted</u> aryl, <u>optionally substituted</u> heteroaryl and <u>optionally</u>

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substituted arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, aryl, heteroaryl and arylalkyl groups may be optionally substituted;

 R^{13} is selected from the group of optionally substituted $C_1 - C_8$ alkyl, optionally substituted $C_1 - C_8$ haloalkyl, optionally substituted $C_1 - C_8$ heteroalkyl, optionally substituted $C_2 - C_8$ alkenyl, optionally substituted $C_2 - C_8$ alkynyl, optionally substituted $C_3 - C_8$ cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted arylalkyl and optionally substituted heteroarylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, alkenyl, alkynyl, cycloalkyl, aryl, heteroaryl, arylalkyl and heteroarylalkyl groups may be optionally substituted;

 R^{16} is selected from the group of hydrogen, <u>optionally substituted</u> $C_1 - C_8$ alkyl, <u>optionally substituted</u> $C_1 - C_8$ haloalkyl, <u>optionally substituted</u> $C_1 - C_8$ heteroalkyl, COR^{17} , CO_2R^{17} and $CONR^{12}R^{17}$, wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted;

 R^{17} is selected from the group of hydrogen, <u>optionally substituted</u> $C_1 - C_8$ alkyl, <u>optionally substituted</u> $C_1 - C_8$ haloalkyl and <u>optionally substituted</u> $C_1 - C_8$ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted;

 R^{18} is selected from the group of hydrogen, F, Br, Cl, I, CN, $C_1 - C_8$ alkyl, optionally substituted $C_1 - C_8$ haloalkyl, $C_4 - C_8$ heteroalkyl, OR^{16} , $NR^{16}R^{17}$, SR^{16} , CH_2R^{16} , COR^{47} , CO_2R^{17} , $CONR^{16}R^{17}$, SOR^{17} and SO_2R^{17} , wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted;

 R^{19} is selected from the group of hydrogen, <u>optionally substituted</u> $C_1 - C_8$ alkyl, <u>optionally substituted</u> $C_1 - C_8$ haloalkyl, <u>optionally substituted</u> $C_1 - C_8$ heteroalkyl, <u>optionally substituted</u> $C_2 - C_8$ alkenyl, <u>optionally substituted</u> $C_3 - C_8$ cycloalkyl, <u>optionally substituted</u> aryl, <u>optionally substituted</u> heteroaryl, <u>optionally substituted</u> arylalkyl and <u>optionally substituted</u> heteroarylalkyl, <u>wherein the alkyl, haloalkyl, heteroalkyl, alkenyl, alkynyl, cycloalkyl, aryl, heteroaryl, arylalkyl and heteroarylalkyl groups may be optionally substituted;</u>

m is selected from the group of 0, 1 and 2;

n is selected from the group of 0, 1 and 2;

V is selected from the group of O and S;

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W is selected from the group of O, $S(O)_n$, NH, $N\{R^{13}\}$, $N\{C(Y)R^{11}\}$ and $N\{SO_2R^{11}\}$;

X and Z each independently is selected from the group of O, $S(O)_n$, NH, $N\{R^{11}\}$, $N\{C(Y)R^{11}\}$, $N\{SO_2R^{12}\}$ and $N\{S(O)R^{12}\}$; and

Y is selected from the group of O, S, $N\{R^{19}\}$ and $N\{OR^{19}\}$; and pharmaceutically acceptable salts thereof.

- 59. (original) A pharmaceutical composition according to claim 58, wherein said composition is suitable for enteral, parenteral, suppository or topical administration.
- 60. (currently amended) A pharmaceutical composition according to claim 58, wherein R^1 is selected from the group of hydrogen, F, Cl, OR^9 , $NR^{10}R^{11}$, $S(O)_nR^9$, optionally substituted $C_1 C_4$ alkyl, optionally substituted $C_1 C_4$ haloalkyl and optionally substituted $C_1 C_4$ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted.
- 61. (currently amended) A pharmaceutical composition comprising a compound according to claim 1, wherein R^2 is selected from the group of hydrogen, F, Cl, Br, I, CF₃, CF₂Cl, CF₂H, CFH₂, CF₂OR⁹, CH₂OR⁹, OR⁹, S(O)_nR⁹, optionally substituted C₁ C₆ alkyl, optionally substituted C₁ C₆ haloalkyl, optionally substituted C₁ C₆ heteroalkyl, optionally substituted C₂ C₆ alkynyl and optionally substituted C₂ C₆ alkenyl, wherein the alkyl, haloalkyl, heteroalkyl, alkynyl and alkenyl groups may be optionally substituted.
- 62. (currently amended) A pharmaceutical composition according to claim 59, wherein

 R^1 is selected from the group of hydrogen, F and optionally substituted C_1-C_4 alkyl; and

 R^2 is selected from the group of hydrogen, <u>optionally substituted</u> $C_1 - C_2$ alkyl, <u>optionally substituted</u> $C_1 - C_2$ haloalkyl and <u>optionally substituted</u> $C_1 - C_2$ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted.

63. (currently amended) A pharmaceutical composition according to claim 58, wherein R^3 is selected from the group of hydrogen, <u>optionally substituted</u> $C_1 - C_6$ alkyl, <u>optionally substituted</u> $C_1 - C_6$ haloalkyl, <u>optionally substituted</u> $C_1 - C_6$ heteroalkyl, $C(Y)OR^{11}$ and $C(Y)NR^{10}R^{11}$, wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted; or

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R³ and R⁶ taken together form a three to eight membered saturated or unsaturated carbocyclic ring.

- 64. (currently amended) A pharmaceutical composition according to claim 58, wherein R⁶ is selected from the group of hydrogen, CF₃, CF₂Cl, CF₂H, CFH₂, optionally substituted C₁ C₆ alkyl, optionally substituted C₁ C₆ haloalkyl, optionally substituted aryl, optionally substituted arylalkyl, optionally substituted arylalkyl, optionally substituted heteroaryl, optionally substituted C₂ C₆ alkynyl and optionally substituted C₂ C₆ alkenyl, wherein the alkyl, heteroalkyl, haloalkyl, aryl, arylalkyl, heteroaryl, alkynyl and alkenyl groups may be optionally substituted.
- 65. (currently amended) A pharmaceutical composition according to claim 64, wherein R^6 is selected from the group of hydrogen, CF_3 , CF_2Cl , CF_2H , CFH_2 , optionally substituted $C_1 C_4$ alkyl, optionally substituted $C_1 C_4$ haloalkyl, optionally substituted $C_1 C_4$ heteroalkyl, optionally substituted $C_2 C_4$ alkynyl and optionally substituted $C_2 C_4$ alkenyl, wherein the alkyl, heteroalkyl, haloalkyl, alkynyl and alkenyl groups may be optionally substituted.
- 66. (currently amended) A pharmaceutical composition according to claim 58, wherein R^5 is selected from the group of hydrogen, CF_3 , CF_2Cl , CF_2H , CFH_2 , optionally substituted $C_1 C_6$ alkyl, optionally substituted $C_1 C_6$ haloalkyl, optionally substituted $C_1 C_6$ heteroalkyl, optionally substituted $C_2 C_6$ alkynyl and optionally substituted $C_2 C_6$ alkenyl, wherein the alkyl, haloalkyl, heteroalkyl, alkynyl and alkenyl groups may be optionally substituted.
- 67. (currently amended) A pharmaceutical composition according to claim 66, wherein R^5 is selected from the group of hydrogen, CF_3 , CF_2Cl , CF_2H , CFH_2 , optionally substituted $C_1 C_4$ alkyl, optionally substituted $C_1 C_4$ haloalkyl and optionally substituted $C_1 C_4$ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted.
- 68. (currently amended) A pharmaceutical composition according to claim 58, wherein R^7 and R^8 each independently is selected from the group of hydrogen, F, Cl, optionally substituted $C_1 C_4$ alkyl, optionally substituted $C_1 C_4$ haloalkyl and optionally substituted $C_1 C_4$ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted.

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69. (currently amended) A pharmaceutical composition according to claim 58, wherein

 R^9 is selected from the group of hydrogen, <u>optionally substituted</u> $C_1 - C_6$ alkyl, <u>optionally substituted</u> $C_1 - C_6$ haloalkyl, <u>and optionally substituted</u> $C_1 - C_6$ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted; and

 R^{10} is selected from the group of hydrogen, $S(O)R^{12}$, SO_2R^{12} , $C(O)R^{12}$, CO_2R^{12} , optionally substituted $C_1 - C_6$ alkyl, optionally substituted $C_1 - C_6$ haloalkyl and optionally substituted $C_1 - C_6$ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted.

- 70. (currently amended) A pharmaceutical composition according to claim 58, wherein R^4 is selected from the group of hydrogen, <u>optionally substituted</u> $C_1 C_4$ alkyl, <u>optionally substituted</u> $C_1 C_4$ haloalkyl and <u>optionally substituted</u> $C_1 C_4$ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted.
- 71. (currently amended) A pharmaceutical composition according to claim 58, wherein R^{13} is selected from the group of CF_3 , CF_2Cl , CF_2H , CFH_2 , CH_2CF_3 , CH_2CF_2Cl , CH_2CCl_2F , optionally substituted $C_1 C_6$ alkyl, optionally substituted $C_1 C_6$ haloalkyl, optionally substituted $C_1 C_6$ heteroalkyl, optionally substituted $C_2 C_6$ alkenyl, optionally substituted $C_3 C_6$ cycloalkyl, optionally substituted aryl, optionally substituted arylalkyl and optionally substituted heteroaryl, optionally substituted arylalkyl and optionally substituted heteroarylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, alkenyl, alkynyl, eycloalkyl, aryl, heteroaryl, arylalkyl and heteroarylalkyl groups may be optionally substituted; or

 ${\rm R}^6$ and ${\rm R}^{13}$ taken together form a five to seven membered saturated or unsaturated heterocyclic ring.

72. (currently amended) A pharmaceutical composition according to claim 71, wherein R¹³ is selected from the group of CF₃, CF₂Cl, CF₂H, CFH₂, CH₂CF₃, CH₂CF₂Cl, CH₂CCl₂F, methyl, ethyl, propyl, isopropyl, isobutyl, cyclopropylmethyl, and allyl; or

 ${\bf R}^6$ and ${\bf R}^{13}$ taken together form a five membered saturated or unsaturated heterocyclic ring.

73. (currently amended) A pharmaceutical composition according to claim 58, wherein R^{18} is selected from the group of hydrogen, F, Cl, OR^{16} , SR^{16} , $NR^{16}R^{17}$, $C_1 - C_4$

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alkyl, and optionally substituted $C_1 - C_4$ haloalkyl and C_4 — C_4 heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted.

74. (currently amended) A pharmaceutical composition according to claim 58, wherein R^{19} is selected from the group of hydrogen, <u>optionally substituted</u> $C_1 - C_4$ alkyl, <u>optionally substituted</u> $C_1 - C_4$ haloalkyl and <u>optionally substituted</u> $C_1 - C_4$ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups may be optionally substituted.

- 75. (original) A pharmaceutical composition according to claim 58, wherein m is 0 or 1.
- 76. (original) A pharmaceutical composition according to claim 58, wherein W is selected from the group of NH, $N\{R^{13}\}$, $N\{C(Y)R^{11}\}$ and $N\{SO_2R^{11}\}$; and X is selected from the group of O, S, NH and $N\{R^{11}\}$.
- 77. (original) A pharmaceutical composition according to claim 58, wherein Y is O or S; and

Z is selected from the group of NH, $N\{R^{11}\}$ and O.

- 78. (canceled)
- 79. (canceled)
- 80. (currently amended) A method of <u>for</u> treating an individual having a condition mediated by an androgen receptor comprising administering to said individual a pharmaceutically effective amount of a compound according to any one of claims 1, 56, or 57.
- 81. (currently amended) A <u>The</u> method according to claim 80, wherein said compound is represented by formula (I).
- 82. (currently amended) A <u>The</u> method according to claim 80, wherein said compound is represented by formula (II).
- 83. (currently amended) A <u>The</u> method according to claim 80, wherein said compound is represented by formula (III).
- 84. (currently amended) A <u>The</u> method according to claim 80, wherein said compound is represented by formula (IV).
- 85. (currently amended) A <u>The</u> method according to claim 80, wherein said condition is selected from the group of acne, male-pattern baldness, sexual dysfunction,

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impotence, wasting diseases, hirsutism, hypogonadism, prostatic hyperplasia, osteoporosis, cancer cachexia, and hormone-dependent cancers.

86. (currently amended) A <u>The</u> method according to claim 80, wherein said condition is alleviated with a therapy selected from the group of male hormone replacement therapy, female androgen replacement therapy and stimulation of hematopoiesis.

- 87. (currently amended) A method of <u>for</u> modulating an androgen receptor in an individual comprising administering to said individual an androgen receptor modulating effective amount of a compound according to any one of claims 1, 56, or 57.
- 88. (currently amended) A <u>The</u> method according to claim 87, wherein said individual has a condition mediated by an androgen receptor.
- 89. (original) A method according to claim 87, wherein said condition is selected from the group of acne, male-pattern baldness, sexual dysfunction, impotence, wasting diseases, hirsutism, hypogonadism, prostatic hyperplasia, osteoporosis, cancer cachexia, hormone-dependent cancers and a process mediated by an anabolic agent.
- 90. (currently amended) A <u>The</u> method according to claim 87, wherein said condition is alleviated with a therapy selected from the group of male hormone replacement therapy, female androgen replacement therapy and stimulation of hematopoiesis.
- 91. (currently amended) A The method according to claim 87, wherein said modulation is activation.
- 92. (currently amended) A <u>The</u> method according to claim 91, wherein said individual has a condition mediated by an androgen receptor.
- 93. (currently amended) A <u>The</u> method according to claim 92, wherein said condition is selected from the group of acne, male-pattern baldness, sexual dysfunction, impotence, wasting diseases, hirsutism, hypogonadism, prostatic hyperplasia, osteoporosis, cancer cachexia, hormone-dependent cancers and a process mediated by an anabolic agent.
- 94. (currently amended) A <u>The</u> method according to claim 92, wherein said condition is alleviated with a therapy selected from the group of male hormone replacement therapy, female androgen replacement therapy and stimulation of hematopoiesis.
- 95. (currently amended) A <u>The</u> method according to claim 91, wherein said compound provides 50% maximal activation of AR at a drug concentration of less than 100 nM.

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96. (currently amended) A <u>The</u> method according to claim 91, wherein said compound provides 50% maximal activation of AR at a drug concentration of less than 50 nM.

- 97. (currently amended) A <u>The</u> method according to claim 91, wherein said compound provides 50% maximal activation of AR at a drug concentration of less than 20 nM.
- 98. (currently amended) A <u>The</u> method according to claim 91, wherein said compound provides 50% maximal activation of AR at a drug concentration of less than 10 nM.
- 99. (currently amended) A <u>The</u> method according to claim 87, wherein said modulation is inhibition.
- 100. (currently amended) A <u>The</u> method according to claim 99, wherein said individual has a condition mediated by an androgen receptor.
- 101. (currently amended) A <u>The</u> method according to claim 100, wherein said condition is selected from the group of acne, male-pattern baldness, sexual dysfunction, impotence, wasting diseases, hirsutism, hypogonadism, prostatic hyperplasia, osteoporosis, cancer cachexia, hormone-dependent cancers and a process mediated by an anabolic agent.
- 101102. (currently amended) A <u>The</u> method according to claim 100, wherein said condition is alleviated with a therapy selected from the group of male hormone replacement therapy, female androgen replacement therapy and stimulation of hematopoiesis.
- 103. (currently amended) A <u>The</u> method according to claim 99, wherein said compound provides 50% maximal inhibition of AR at a drug concentration of less than 100 nM.
- 104. (currently amended) A <u>The</u> method according to claim 99, wherein said compound provides 50% maximal inhibition of AR at a drug concentration of less than 50 nM.
- 105. (currently amended) <u>The A method according to claim 99</u>, wherein said compound provides 50% maximal inhibition of AR at a drug concentration of less than 20 nM.
- 106. (currently amended) A <u>The</u> method according to claim 99, wherein said compound provides 50% maximal inhibition of AR at a drug concentration of less than 10 nM.
- 107. (currently amended) A method of <u>for</u> treating cancer, comprising administering to a patient in need thereof a pharmaceutically effective amount of a compound according to any one of claims 1, 56 or 57.